

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1 through 24 were previously cancelled. Please cancel claims 25, 28, 31, 34, and 36, and amend claims 26, and 35 as shown below. Please add new claims 40 - 42.

1. – 25. (cancelled)

26. (currently amended) ~~The method according to claim 25,~~ A method for determining an effect of a test compound on binding of Nuclear factor-kappaB Essential Modulator (NEMO) polypeptide to a polypeptide encoded by a putative tumor suppressor gene associated with familial cylindromatosis (CYLD), wherein the NEMO polypeptide is selected from the group consisting of:

(a) a NEMO polypeptide comprising amino acids 300 through 419 of SEQ ID NO:2;

(b) a fragment of a NEMO polypeptide comprising amino acids x through y of SEQ ID NO:2, wherein x is selected from the group consisting of 386, 385, 384, 383, 382, 381, 380, 379, 378 and 377, and y is selected from the group consisting of 409, 410, 411, 412, 413, 414, 415, 416, 417, 418 and 419, and

(c) a fragment of a NEMO polypeptide comprising amino acids x through y of SEQ ID NO:2, wherein x is an integer between 300 and 387, and y is selected from the group consisting of 409, 410, 411, 412, 413, 414, 415, 416, 417, 418 and 419;

and the CYLD polypeptide comprises amino acids 1 through 956 of SEQ ID NO:4, and further wherein the NEMO polypeptide and the CYLD polypeptide are capable of binding to each other, the method comprising the steps of:

(i) contacting a test compound with the NEMO polypeptide and the CYLD polypeptide; and

(ii) determining the effect of the test compound on the binding of the NEMO polypeptide to the CYLD polypeptide by comparing the binding of the NEMO polypeptide to the CYLD polypeptide in the presence of the test compound to the binding of the NEMO polypeptide to the CYLD polypeptide in the absence of the test compound, wherein when the amount of binding of the NEMO polypeptide to the CYLD polypeptide in the presence of the test compound is less than about 50 % of the binding of the NEMO polypeptide to the CYLD polypeptide in the absence of the test compound, the test compound inhibits the binding of NEMO and CYLD.

27. (previously presented) The method of claim 26, wherein the NEMO polypeptide is selected from the group consisting of:

- (a) a NEMO polypeptide comprising amino acids 300 through 419 of SEQ ID NO:2; and
- (b) a NEMO polypeptide comprising amino acids 387 through 419 of SEQ ID NO:2.

28. (canceled)

29. (previously presented) The method of claim 26, wherein the method utilizes a homogeneous assay format.

30. (previously presented) The method of claim 27, wherein the method utilizes a homogeneous assay format.

31. (canceled).

32. (previously presented) The method of claim 29, wherein homogeneous assay format is selected from a group consisting of fluorescence resonance energy transfer, fluorescence polarization, time-resolved fluorescence resonance energy transfer, scintillation proximity assays, reporter gene assays, fluorescence quenched enzyme substrate, chromogenic enzyme substrate and electrochemiluminescence assays.

33. (previously presented) The method of claim 30, wherein homogeneous assay format is selected from a group consisting of fluorescence resonance energy transfer, fluorescence polarization, time-resolved fluorescence resonance energy transfer, scintillation proximity assays, reporter gene assays, fluorescence quenched enzyme substrate, chromogenic enzyme substrate and electrochemiluminescence assays.

34. (currently canceled)

35. (currently amended) The method according to claim ~~26~~ 25, wherein the NEMO polypeptide is selected from the group consisting of:

- (a) a NEMO polypeptide consisting essentially of amino acids 300 through 419 of SEQ ID NO:2;
- (b) a fragment of a NEMO polypeptide consisting essentially of amino acids x through y of SEQ ID NO:2, wherein x is selected from the group consisting of 386, 385, 384, 383, 382, 381,

380, 379, 378 and 377, and y is selected from the group consisting of 409, 410, 411, 412, 413, 414, 415, 416, 417, 418 and 419; and

(c) a fragment of a NEMO polypeptide consisting essentially of amino acids x through y of SEQ ID NO:2, wherein x is an integer between 300 and 387, and y is selected from the group consisting of 409, 410, 411, 412, 413, 414, 415, 416, 417, 418 and 419.

36. (canceled)

37. (previously presented) The method of claim 35, wherein the method utilizes a homogeneous assay format.

38. (previously presented) The method of claim 36, wherein homogeneous assay format is selected from a group consisting of fluorescence resonance energy transfer, fluorescence polarization, time-resolved fluorescence resonance energy transfer, scintillation proximity assays, reporter gene assays, fluorescence quenched enzyme substrate, chromogenic enzyme substrate and electrochemiluminescence assays.

39. (previously presented) The method of claim 37, wherein homogeneous assay format is selected from a group consisting of fluorescence resonance energy transfer, fluorescence polarization, time-resolved fluorescence resonance energy transfer, scintillation proximity assays, reporter gene assays, fluorescence quenched enzyme substrate, chromogenic enzyme substrate and electrochemiluminescence assays.

40. (new) A method for determining an effect of a test compound on binding of Nuclear factor-kappaB Essential Modulator (NEMO) polypeptide to a polypeptide encoded by a putative tumor suppressor gene associated with familial cylindromatosis (CYLD) wherein the NEMO polypeptide comprises amino acids 377 through 409 of SEQ ID NO:2 and the CYLD polypeptide comprises amino acids 1 through 956 of SEQ ID NO:4, and further wherein the NEMO polypeptide and the CYLD polypeptide are capable of binding to each other, the method comprising the steps of:

- (a) contacting a test compound with the NEMO polypeptide and the CYLD polypeptide; and
- (b) determining the effect of the test compound on the binding of the NEMO polypeptide to the CYLD polypeptide by comparing the binding of the NEMO polypeptide to the CYLD polypeptide in the presence of the test compound to the binding of the NEMO polypeptide to the CYLD polypeptide in the absence of the test compound, wherein when the amount of binding of

the NEMO polypeptide to the CYLD polypeptide in the presence of the test compound is less than about 50 % of the binding of the NEMO polypeptide to the CYLD polypeptide in the absence of the test compound, the test compound inhibits the binding of NEMO and CYLD.

41. (new) The method of claim 40, wherein the method utilizes a homogeneous assay format.

42. (new) The method of claim 41, wherein the homogeneous assay format is selected from a group consisting of fluorescence resonance energy transfer, fluorescence polarization, time-resolved fluorescence resonance energy transfer, scintillation proximity assays, reporter gene assays, fluorescence quenched enzyme substrate, chromogenic enzyme substrate and electrochemiluminescence assays.